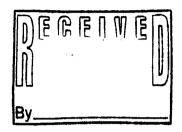


GOVERNMENT OF PUERTO RICO GOVERNOR'S OFFICE ENVIRONMENTAL QUALITY BOAR CHAIRMAN'S OFFICE





Mr. Allan B. Dyer President AES Puerto Rico P.O. Box 1890 Guayama, P.R. 00785

RE: Community Concerns about AGREMAX

Dear Mr. Dyer:

As you stated in your December 7th, 2010 letter, some citizens have recently brought to our attention certain issues regarding potential radioactive levels of your manufactured aggregate (commercially known as AGREMAX). Last December, community members represented by their consultants, Dr. Félix Aponte and Dr.Osvaldo Rosario, informed the Environmental Quality Board (EQB) that they had technical documents and laboratory analyses that support their allegations of harmful radioactive levels resulting from AGREMAX. These technical documents include analysis results of certain samples collected from places where the manufactured aggregate was allegedly used as structural fill material. Drs. Aponte and Rosario indicated that the results show some levels of radioactivity that are of concern to the community members they represent.

As part of our statutory duties, EQB is empowered to investigate situations that have the potential of adversely affecting the quality of our environment and/or endanger the health and well being of the people. Likewise, as part of our commitment to a balanced and sustainable development, EQB is in the process of drafting guidelines for the beneficial use of coal combustion products (CCPs) in Puerto Rico. Consequently, EQB has reviewed available technical data regarding the specific uses of CCPs in construction projects in other jurisdictions.

As part of the guidelines drafting, we are reviewing the available data, including the analyses submitted by the community groups in which they support their allegation that AGREMAX has radioactive properties of concern. In order to have a thorough evaluation, EQB understands it would benefit if AES-Guayama presents for our consideration and review recent results of the radioactive potential of AES raw material, in-process material, and AGREMAX.

We expect to receive the required information on or before April 1st, 2011 as we intend to finish and publish the guidelines in spring. Thank you in advance for collaborating with EQB in its initiative of preparing Guidelines for Beneficial use of Coal Combustion Products in Puerto Rico.

If you have any questions regarding this request, you may contact Associate Member of the Board, Mr. Reynaldo Matos.

Cordially,

Pedro J. Nieves Miranda, Esq.

Chairman



ANALYTICAL REPORT

Job Number: 680-60518-1

b Description: Environmental Dialogne Committee

For:

Kennedy & Madonna, LLP 48 Dewitt Mills Rd Hurley, NY 12443

Attention: Mr. Kevin Madonna

Sheila Hoffman
Project Manager I
sheila.hoffman@testamericainc.com
09/28/2010

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; AZ: AZ0741; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LA000244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q



Job Number: 680-60518-1

Description	Lab Location	Method	Preparation Method
Matrix Solid		· · · · · ·	
Semivolatile Organic Compounds (GC/MS) Low level PAH	TAL SAV	SW846 8270C_	LL_PAH
Microwave Extraction	TAL SAV		SW846 3546
Metals (ICP)	TAL SAV	SW846 6010B	
Preparation, Metals	TAL SAV		SW846 3050B
Mercury (CVAA)	TAL SAV	SW846 7471A	
Preparation, Mercury	TAL SAV		SW846 7471A
Sulfur, Total	TAL SAV	SW846 9038	
Bomb Preparation Method for Solid Waste	TAL SAV		SW846 5050
SW846 8280 Dioxins	TAL WSC	SW846 8280	
Total Gross Alpha/Beta	SC0009	EPA 900.0	

Lab References:

SC0009 = KNL Laboratory Services

TAL SAV = TestAmerica Savannah

TAL WSC = TestAmerica West Sacramento

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Method	Analyst	Analyst ID
SW846 8270C_LL_PAH	Hao, Lili	LH
SW846 6010B	Bland, Brian	BCB
SW846 7471A	Eaton, Cliff	CE
SW846 9038	Nelson, Christopher	CN

SAMPLE SUMMARY

Client: Kennedy & Madonna, LLP Job Number: 680-60518-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received	
680-60518-1	Salinas 1	Solid	08/18/2010 0900	08/19/2010 0935	



2742 N. Florida Ave. P.O. Box 1833 Tampa, Florida 33601 (813) 229-2879 Fax (813) 229-0002

TestAmerica-Savannah 5102 LaRoche Ave. Savannah, GA. 31404

Attn: Sheila Hoffman

Field Custody: Client/Field ID:

Sample Collection:

Lab ID No:

10.5776

Lab Custody Date: 8-25-10/1100 Sample description: solid

CERTIFICATE OF ANALYSIS

7	TT	D.	1	+ ~	Analysis	Method	Detection Limit
<u>Parameter</u>	Units	Re	sul	LB	Date	Mechod	111111111111111111111111111111111111111
Gross Alpha	pCi/g	9.9	±	1.6	8-31-10/0800	DOE RP710	1.6
Gross Beta	pCi/g	5.7	±	0.8	8-31-10/0800	DOE RP710	1.6

Alpha Standard: Th-230 Beta Standard: Ca-137

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09/28/2010

Analytical Data

Client: Kennedy & Madonna, LLP

Job Number: 680-60518-1

Client Sample ID:

Salinas 1

Lab Sample ID:

680-60518-1

Client Matrix:

Solid

% Moisture:

35.7

Date Sampled: 08/18/2010 0900

Date Received: 08/19/2010 0935

DET OU LE I AIT OCTITITORALE OTGANIC OCTIPOLITAS (GONTIO) LOW JEVEL I AI	8270C_LL_PAH Semivolatile	Organic Co	ompounds ((GC/MS)	Low level PAH
--	---------------------------	------------	------------	---------	---------------

Method:

8270C_LL_PAH

Analysis Batch: 680-178401

Instrument ID:

MSK

Preparation:

3546

Lab File ID:

Qualifier

Dilution:

Prep Batch: 680-178201

k1578.d

1.0

Result (ug/Kg)

Initial Weight/Volume:

30.03 g

Date Analyzed: Date Prepared: 08/26/2010 1540 08/25/2010 1121 Final Weight/Volume: Injection Volume:

1 mL 1 uL

RL

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

Analyte	DryWt Corrected: Y
1-Methylnaphthalene	ta del titto de la constitución de la diferentiada de la del transferio de la del constitución de la del transferio del transferio de la del transferio del tra
2 Methylpanhthalene	

<10 <10 2-Methylnaphthalene <10 Acenaphthene

<10 Acenaphthylene Anthracene <10

Benzo[a]anthracene <10 <10

Benzo[a]pyrene Benzo[b]fluoranthene <10 Benzo[g,h,i]perylene <10

Benzo[k]fluoranthene <10 Chrysene <10 Dibenz(a,h)anthracene <10 Fluoranthene <10

Fluorene Indeno[1,2,3-cd]pyrene Naphthalene Pyrene

Phenanthrene Surrogate

o-Terphenyl

%Rec 38

<10

<10

<10

<10

<10

Qualifier

Acceptance Limits

Analytical Data

Client: Kennedy & Madonna, LLP

Job Number: 680-60518-1

Client Sample ID:

Salinas 1

Lab Sample ID:

680-60518-1

Client Matrix:

Solid

% Moisture:

35.7

Date Sampled: 08/18/2010 0900

Date Received: 08/19/2010 0935

6010B Metals (ICP)

Method: Preparation:

6010B 3050B

Analysis Batch: 680-178536

Instrument ID: Lab File ID:

ICPD 082710.chr

Dilution:

1.0

Prep Batch: 680-178345

Initial Weight/Volume:

Date Analyzed:

08/28/2010 0406

1.01 g

Date Prepared:

08/26/2010 1135

Final Weight/Volume:

100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg) Qualifier	RL
Antimony	apparament styr in the high proposition of the facility of the high point of the hig	5.3	3.1
Arsenic		23	3.1
Barium		720	1.5
Beryllium		2.2	0.62
Boron		140	15
Cadmium		1.2	0.77
Chromium		35	1.5
Cobalt		12	1.5
Copper		46	3.8
Iron		28000	31
Lead		8.3	1.5
Magnesium		6500	77
Manganese		310	1.5
Molybdenum		8.7	1.5
Nickel		33	6.2
Selenium		19	3.8
Silver		<1.5	1.5
Thallium		<3.8	3.8
Vanadium		130	1.5
Zinc		64	3.1

Method:

7471A

7471A

Anal Prep

Preparation: Dilution:

1.0

08/25/2010 1916

Date Analyzed: Date Prepared:

08/24/2010 1034

Analyte

DryWt Corrected: N

Mercury

Client: Kennedy & Madonna, LLP

Job Number: 680-60518-1

General Chemistry

Client Sample ID:

Salinas 1

Lab Sample ID:

680-60518-1

Client Matrix:

Solid

% Moisture:

35.7

Date Sampled: 08/18/2010 0900

Date Received: 08/19/2010 0935

Analyte

Result

Qual Units RL

Dil Method 1.0 9038

Total Sulfur

7600

mg/Kg

250

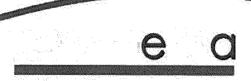
Analysis Batch: 680-178342

Date Analyzed: 08/26/2010 1128

DryWt Corrected: Y

Prep Batch: 680-178338

Date Prepared: 08/26/2010 1000



TestAmerica rojec um er: PO/Contract: 680-60518

Sheila Hoffmann TestAmerica Savannah 5102 Laroche Avenue Savannah, GA 31404

Dear Ms. Hoffmann,

This report contains the analytical results for the sample received under chain of custody by TestAmerica on August 24, 2010. This sample is associated with your 680-60518 project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4402.

Sincerely,

Jill Kellmann Project Manager

Gui Kelmonn

Table of Contents

TestAmerica West Sacramento Project Number G0H240526

Case Narrative

Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

SOLID, 8280A, 2,3,7,8-TCDD

Sample: 1

Sample Data Sheet Method Blank Report Laboratory QC Reports

SOLID, D 2216-90, Percent Moisture

Sample: 1

Sample Data Sheet Laboratory QC Reports

Case Narrative TestAmerica West Sacramento Project Number G0H240526

There are no anomalies associated with this project.





TestAmerica Laboratories West Sacramento Certifications/Accreditations

Certifying State	Certificate é	Certifying State	Certificate \$
Alaska	UST-055	New York*	11666
🗻 . Arizona 🛶	AZ0708	Oregon!*	ر CA-200005 عدر-
Arkansas	88-0691	Pennsylvania	68-1272
California*	01119CA	South Carolina	87014
Colorado	NA NA	Texas	T104704399-08-TX
Connecticut	PH-0691	Utah*	QUAN1
Plorida*	E87570	Virginia	00178
Georgia	960	Washington	C1281
Hawkii	NA	West Virginia	9930C, 334
Illinois	200060	Wisconsin	<u>9982</u> 04680
Kansas*	E-10375	NFESC	NA
Louisiana*	30612	USACE	NA .
Michigan	9947	USDA Foreign Plant	37-82605
Nevada	CA44	USDA Foreign Soil	₱330-09-00055
New Jersey*	CA005	US Fish & Wildlife	LE148388-0
New Mexico	NA	Guam	09-014 r

^{*}NELAP accredited. A more detailed parameter list is available upon request. Updated 3/25/2009

QC Parameter Definitions

QC Batch: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

Method Blank: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD): An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

Duplicate Sample (DU): Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

Surrogates: Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

Matrix Spike and Matrix Spike Duplicate (MS/MSD): An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

Isotope Dilution: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

Control Limits: The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

TestAmerica West Sacramento (916) 373 - 5600

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Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory. Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

State, Zip: CA, 95605 Savannah, GA 31404 Phone (912) 354-7858 Fax (912) 352-0165 5102 LaRoche Avenue TestAmerica Savannah 916-373-5600(Tel) Shipping/Receiving West Sacramento 880 Riverside Parkway. TestAmerica Laboratories, Inc. Client Information (Sub Contract Lab) Environmental Dialogne Committee Possible Hazard Identification Non-Hazard Flammable Skin Init Deliverable Requested: I, II, III, IV, Other (specify) Sample Identification - Client ID (Lab ID) Empty Kit Relinquished by: roject Name: lelinquished by: Custody Seals Intact: Salinas 1 (680-60518-1) Custody Seal No.: Skin Irritant Poison B SSOW#: Project #; 68007797 # OW PC # Due Date Requested: 8/31/2010 Phone Sample TAT Requested (days): Date/Time: 8/18/10 Unknown Date: Sample Eastern 11me 13:00 Radiological (C=comp, G=grab) G=grab) | BT=TBUM A-AII Preservation Code Sample Type Chain of Custody Record Company Company Matrix (vinwater. Sesoid. Orwastelos. Solid ∟øb Рік: Hoffman, Sheila Є-иаі≀ sheila.hoffman@testamericainc.com Time: Special Instructions/QC Requirements Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mont Received by Received by SUBCONTRACT/ 8280A - 2,3,7,8-TCDD Cooler Temperature(s) °C and Other Remarks. Received by Analysis Requested Clear Carner Tracking No(s) Method of Shipment Date/Time 8/24/10 - 1050 Total Number of containers A-HCL B-NaDH C-Zn Acelate D-Nilric Acid E-NaHSOA F-MoOH G-Anchlor H-Ascorbic Acid I-los J-Di Water K-EDTA L-EDA Jcb#: 680-60518-1 Page: Page 1 of 1 CDC No: 680-185191.1 Preservation Codes: Aparella Parking South and a stable 1 lines. M - Hexane A - Nune C - AsNaO2 P - Na2O4S G - Na2SO3 R - Na2SO3 S - R2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify) Company Company Months 09/28 241₀3416) 371



LOT RECEIPT CHECKLIST TestAmerica West Sacramento

CLIENT	TAL.	Savar	nah	PM	UK	, LOG #	66	550
CLIENT LOT# (QUANTIMS IQ)	Ģ	0 H240	526	_QUOTE#	38914	LC	CATION_	WI7C
DATE RECEIVED							Chec	cked (✔)
DELIVERED BY ☐	FEDEX		ON TRAC		CLIE	NT .		
☐ TAL COURIER ☐	TAL SF] VALLEY LO	OGISTICS				
CUSTODY SEAL STATU	IS INT	ACT [] BROKEN	□-N/A				\square
CUSTODY SEAL #(S)		· · · · · · · · · · · · · · · · · · ·	gr.,.					*
SHIPPPING CONTAINER								
TEMPERATURE BLANK								ligional.
SAMPLE TEMPERATUR								
Observed: 4,3,3	Aver	age	Corre	ected Average	4			
IR UNIT: #4	<u>OMETER I</u> #5□	<u>D:</u>	OTHER	·,	;			\leq
7			** ·		٧		tials I	<u>8/24/1</u> 0 Date
pH MEASURED		☐ YES	☐ AN	IOMALY	∠ N/A			
LABELS CHECKED BY PEER REVIEW					i i	*		Ŋ
SHORT HOLD TEST NO				SAMPLE R WETCHEN VOA-ENCC	I ☑ N/A			
☐ METALS NOTIFIE	ED OF FIL	TER/PRES	ERVE VIA V	ERBAL & EM	AIL ZN/A			
COMPLETE SHII	PMENT RI PERATUR	ECEIVED II ES, CONT.	N GOOD CC AINERS, PR	NDITION WI	ΓΗ □N/A :S			
CLOUSEAU	☐ TEN	MPERATUI	RE EXCEED	ED (2 °C – 6 °	°C) ^{*1} 🗹 N/A	T.		
☐ WET ICE	BLU	JE ICE [] GEL PACK	⟨ □ NO CO	OLING AGE	NTS USED	□F	PM NOTIFIE
			۵					8/24/10
						Initials	Da	te
Notes	<u>.</u>						····	<u> </u>
*1 Acceptable temperature ran-	ge for State o	of Wisconsin s	samples is <u>≤</u> 4°C).				

TestAmerica West Sacramento (916) 373 - 5600

QA-185 10/09 RKE, Page 7 of 18

TestAmerica West Sacramento TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

Bottle Lot Inventory

Lot		
ID:	40HZ40526	

	11	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*																		/		
VOAh*							·													
AGB					,									<u></u>						
AGBs																				<u> </u>
250AGB									 					·						
250AGBs				17																
250AGBn	1			<u> </u>						ļ										
500AGB						 											f			
AGJ											<u> </u>								,	
500AGJ	1																			
250AGJ					1	1				<u> </u>	 -									
125AGJ		<u> </u>			-						 -									
CGJ						ita	,	<u> </u>			<u> </u>				L					
500CGJ							T		 											
250CGJ						1				<u> </u>							·			
125CGJ						 					<u> </u>									
PJ																				
PJn						٠.				<u> </u>										
500PJ '	-						l					•								
500PJn										ļ										
500PJna							· · · · · ·													
500PJzn/na	1 :										 									
250PJ													,							
250PJn			7.3		•••															
250PJna		-																±1.		$\overline{}$
250PJzn/na								٠.										-		
Acelate Tube								1												
"CT																				
Encore																				
Folder/filter		. 2			Ф,															
PUF																				
Petri/Filter				'																
XAD Trap																			*****	
Ziploc																				
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

 $\begin{vmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 \\ h = hydrochloric acid s = sulfuric acid na = sodium hydroxide n = nitric acid zn = zinc acetate$

Number of VOAs with air bubbles present / total number of VOA's

QA-185 5/05 EM

Page 3

09/28/2010 8 of 18

SOLID, 8280A, 2,3,7,8-TCDD

TestAmerica Savannah

Client Sample ID: SALINAS 1 (680-60518-1)

Trace Level Organic Compounds

G0H240526-001: 08/18/10: 09/04/10 rep a c: 0246122 Dilution Factor: 1 % Moisture: 36	Work Order #: Date Received: Analysis Date:	08/24/10	Matrix	•••••
PARAMETER 2,3,7,8-TCDD	RESULT ND	DETECTION LIMIT 0.50	UNITS ng/g	METHOD SW846 8280A
INTERNAL STANDARDS 13C-2,3,7,8-TCDD	PERCENT RECOVERY 76	RECOVERY LIMITS (25 - 150)		
	PERCENT	RECOVERY		

LIMITS

(25 - 150)

RECOVERY

76

SURROGATE
37C14-2,3,7,8-TCDD

QC DATA ASSOCIATION SUMMARY

G0H240526

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	ASTM D 2216-90 SW846 8280A		0256307	0256200

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: G0H240526 Work Order #...: L6HK51AA Matrix..... SOLID

MB Lot-Sample #: G0I030000-122

Prep Date....: 09/04/10 Prep Batch #...: 0246122

Analysis Date..: 09/07/10

Dilution Factor: 1

DETECTION PARAMETER RESULT LIMIT UNITS 2,3,7,8-TCDD ND 0.50 ng/g SW846 8280A

PERCENT RECOVERY INTERNAL STANDARDS RECOVERY LIMITS 13C-2, 3, 7, 8-TCDD (25 - 150)PERCENT RECOVERY SURROGATE RECOVERY

LIMITS 37C14-2,3,7,8-TCDD (25 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

GOH240526 Work Order #...: L6HK51AC Matrix...... SOLID

RECOVERY

le#: G0I030000-122

...: 09/04/10 **Analysis Date..:** 09/07/10

PERCENT

ep a c | ...: 0246122

Dilution Factor: 1

PARAMETER RECOVERY LIMITS METHOD

2,3,7,8-TCDD 106 (65 - 125) SW846 8280A

PERCENT RECOVERY
RECOVERY
77 LIMITS
(25 - 150)

 SURROGATE
 PERCENT
 RECOVERY

 37C14-2,3,7,8-TCDD
 80
 (25 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

GOH240526 Work Order #...: L6HK51AC Matrix...... SOLID

le#: G0I030000-122

...: 09/04/10 Analysis Date..: 09/07/10

...: 0246122

Di 1on Factor: 1

 PARAMETER
 AMOUNT
 AMOUNT
 AMOUNT
 UNITS
 RECOVERY
 METHOD

 2,3,7,8-TCDD
 2.50
 2.66
 ng/g
 106
 SW846
 8280A

PERCENT RECOVERY
RECOVERY
77 LIMITS
(25 - 150)

PERCENT RECOVERY
RECOVERY
80 LIMITS
(25 - 150)

NOTE(S):

SURROGATE

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

37C14-2,3,7,8-TCDD

SOLID, D 2216-90, Percent Moisture

TestAmerica Savannah

Client Sample ID: SALINAS 1 (680-60518-1)

General Chemistry

Lot-Sample #...: GOH240526-001 Work Order #...: L53KG Matrix.....: SOLID

Date Sampled...: 08/18/10 Date Received..: 08/24/10

% Moisture....: 36

 PARAMETER
 RESULT
 RL
 UNITS
 METHOD
 ANALYSIS
 DATE
 BATCH #

 Percent Moisture
 35.6
 0.10
 %
 ASTM D 2216-90
 09/13-09/15/10
 0256307

Dilution Factor: 1

QC DATA ASSOCIATION SUMMARY

G0H240526

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID SOLID	ASTM D 2216-90 SW846 8280A		0256307 0246122	0256200

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: GOH240526 Work Order #...: L6DF4-SMP Matrix.....: SOLID

L6DF4-DUP

Date Sampled...: 08/27/10 Date Received..: 08/31/10

% Moisture....: 5.4

DUPLICATE RPD PREPARATION-PREP PARAM RESULT RESULT UNITS RPD LIMIT METHOD ANALYSIS DATE BATCH # Percent Moisture SD Lot-Sample #: G0H310579-021 5.5 5.0 ક 9.5 (0-20) ASTM D 2216-90 09/13-09/15/10 0256307

Dilution Factor: 1

Method: 8270C_LL_PAH Preparation: 3546

Instrument ID: MSK Lab File ID: k1575.d

Initial Weight/Volume: 30.06 g Final Weight/Volume:

1 mL

Injection Volume:

Analyte	Result	RL
1-Methylnaphthalene	************************************	6.7
2-Methylnaphthalene	<6.7	6.7
Acenaphthene	<6.7	6.7
Acenaphthylene	<6.7	6.7
Anthracene	<6.7	6.7
Benzo[a]anthracene	<6.7	6.7
Benzo[a]pyrene	<6.7	6.7
Benzo[b]fluoranthene	<6.7	6.7
Benzo[g,h,i]perylene	<6.7	6.7
Benzo[k]fluoranthene	<6.7	6.7
Chrysene	<6.7	6.7
Dibenz(a,h)anthracene	<6.7	6.7
Fluoranthene	<6.7	6.7
Fluorene	<6.7	6.7
Indeno[1,2,3-cd]pyrene	<6.7	6.7
Naphthalene	<6.7	6.7
Pyrene	<6.7	6.7
Phenanthrene	<6.7	6.7
Surrogate	% Rec	
o-Terphenyl	83	- Title dem destriction est del dem statement aussense sense sense seglen en 1950 est deby sejle del distriction graph de himman mattable deby displayed in propriet del distriction con continuence aussense sense sens

Quality Control Results

Job Number: 680-60518-1

Method: 8270C_LL_PAH Preparation: 3546

	9	<u> 6 Rec.</u>					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	
1-Methylnaphthalene	66	67	35 - 130	2	50	Al-Microsoft in the material and a state of the first and a state of the state of the first and a state of the state of the first and a state of the state of the state of	
2-Methylnaphthalene	77	80	34 - 130	5	50		
Acenaphthene	66	71	36 - 130	9	50		
Acenaphthylene	70	76	34 - 130	9	50		
Anthracene	82	84	38 - 130	4	50		
Benzo[a]anthracene	84	89	44 - 130	6	50		
Benzo[a]pyrene	83	92	41 - 130	11	50		
Benzo[b]fluoranthene	89	81	40 - 130	8	50		
Benzo[g,h,i]perylene	80	86	37 - 130	8	50		
Benzo[k]fluoranthene	83	63	42 - 130	26	50		
Chrysene	80	81	46 - 130	2	50		
Dibenz(a,h)anthracene	83	92	36 - 130	11	50		
Fluoranthene	74	80	41 - 130	8	50		
Fluorene	78	83	35 - 130	7	50		
Indeno[1,2,3-cd]pyrene	83	89	35 - 130	8	50		
Naphthalene	67	65	36 - 130	1	50		
Pyrene	76	7 7	41 - 130	3	50		
Phenanthrene	77	80	38 - 130	6	50		
Surrogate	Lo	CS % Rec	LCSD %	Rec	Accept	ance Limits	
o-Terphenyl	78	3	81	SCOlombilist And School Smith Blade Annih Albahali Albahali Albahali Albahali Albahali Albahali Albahali Albaha	29	9 - 130	elikonokonokonokonoko (h. 1600)

Method: 6010B Preparation: 3050B

Instrument ID: ICPD
Lab File ID: 082710.chr
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 100 mL

Analyte	Result	RL
Antimony		commencation and the contraction of the contraction
Arsenic	<2.0	2.0
Barium	° <1.0	1.0
Beryllium	<0.40	0.40
Boron	<10	10
Cadmium	<0.50	0.50
Chromium	<1.0	1.0
Cobalt	<1.0	1.0
Copper	<2.5	2.5
Iron	<20	20
Lead	<1.0	1.0
Magnesium	<50	50
Manganese	<1.0	1.0
Molybdenum	<1.0	1.0
Nickel	<4.0	4.0
Selenium	<2.5	2.5
Silver	<1.0	1.0
Thallium	<2.5	2.5
Vanadium	<1.0	1.0
Zinc	<2.0	2.0

Method: 6010B Preparation: 3050B

Instrument ID: ICPD
Lab File ID: 082710.chr
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit
Antimony	aisisen minin kantaan ta anta alia alia alia alia alia anta minin	46.5	93	75 - 125
Arsenic	200	184	92	75 - 125
Barium	200	193	96	75 - 125
Beryllium	5.00	4.64	93	75 - 125
Boron	100	91.9	92	75 - 125
Cadmium	5.00	4.66	93	75 - 125
Chromium	20.0	18.9	95	75 - 125
Cobalt	50.0	47.0	94	75 - 125
Copper	25.0	23.7	95	75 - 125
Iron	100	98.2	98	75 - 125
Lead	50.0	46.5	93	75 - 125
Magnesium	500	467	93	75 - 125
Manganese	50.0	47.4	95	75 - 125
Molybdenum	50.0	46.3	93	75 - 125
Nickel	50.0	46.9	94	75 - 125
Selenium	200	184	92	75 - 125
Silver	5.00	4.74	95	75 - 125
Thallium	200	192	96	75 - 125
Vanadium	50.0	48.1	96	75 - 125
Zinc	50.0	47.0	94	75 - 125

Method: 7471A Preparation: 7471A

Instrument ID: LEEMAN1 Lab File ID: b082510.chr Initial Weight/Volume: 0.53 g Final Weight/Volume: 50 mL

RL

0.019

Method: 7471A Preparation: 7471A

Instrument ID: LEEMAN1 Lab File ID: b082510.chr Initial Weight/Volume: 0.52 g Final Weight/Volume: 50 mL

MS Lab Sample ID:

680-60518-1

Client Matrix:

Solid

Dilution:

1.0

Date Analyzed: Date Prepared: 08/25/2010 1925 08/24/2010 1034

MSD Lab Sample ID:

680-60518-1

Client Matrix:

Solid

Dilution: Date Analyzed: 1.0

08/25/2010 1928

Date Prepared:

08/24/2010 1034

Method: 9038 Preparation: 5050

Instrument ID: KONELAB1

Lab File ID: N/A

Initial Weight/Volume: .5701 g

Final Weight/Volume:

20 mL

RL

150

Method: 9038 Preparation: 5050

Instrument ID: KONELAB1

Lab File ID: N/A

Initial Weight/Volume: .5034 g

Final Weight/Volume:

100 mL

% Rec.

Limit

93

50 - 120

Method: 9038 Preparation: 5050

Instrument ID: KONELAB1

Lab File ID: N/A

Initial Weight/Volume:

Final Weight/Volume:

.5004 g 20 mL

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